

ACCESSION NR: AP4034569

S/0079/64/034/004/1354/1355

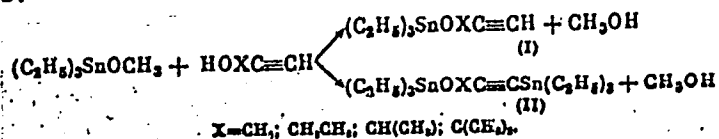
AUTHOR: Shostakovskiy, M. F.; Vlasov, V. M.; Mirskov, R. G.

TITLE: Reaction of triethylmethoxystannane with acetylenic alcohols

SOURCE: Zhurnal obshchey khimii, v. 34, no. 4, 1964, 1354-1355

TOPIC TAGS: triethylmethoxystannane acetylenic alcohol reaction, tin containing acetylenic ether, disproportionation, reaction condition, reactant ratio, acetylenic alcohol, triethylmethoxystannane, stannane

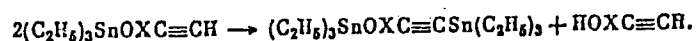
ABSTRACT: Reaction of triethylmethoxystannane with primary, secondary or tertiary acetylenic alcohols containing an acetylenic hydrogen results in the formation of tin-containing acetylenic ethers of two types, depending on reaction conditions and reactant ratios:



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Type I compounds are formed in 80-90% yield by reacting triethylmethoxystannane with a 2-4 fold excess of acetylenic alcohol at -10 C or at room temperature for 30 minutes; 10-20% of type II compounds are also formed. Type II compounds are formed in 80% yield when a 1:1 or 1:2 ratio of stannane:alcohol is heated to 100-110 C for 3-5 hours, or on prolonged stirring at room temperature. On prolonged standing or heating the type I compounds are disproportionated according to the equation:



The following compounds were synthesized and characterized: 3-triethylstannoxypropyn-1, 3-triethylstannoxy-1-triethylstannylpropyn-1, 4-triethylstannoxybutyn-1, 4-triethylstannoxy-1-triethylstannylbutyn-1, 3-triethylstannoxy-3-methylpropyn-1, 3-triethylstannoxy-1-triethylstannyl-3-methylpropyn-1, 3-triethylstannoxy-3,3-dimethylpropyn-1, and 3-triethylstannoxy-1-triethylstannyl-3,3-dimethylpropyn-1. Orig. art. has: 2 equations.

ASSOCIATION: Irkutskiy institut organicheskoy khimii Sibirskogo otdeleniya, Akademii nauk SSSR (Irkutsk Institute of Organic Chemistry, Siberian Division,

Card 2/3

ACCESSION NR: AP4034569

Academy of Sciences, SSSR)

SUBMITTED: 28Nov63

DATE ACQ: 11May64

ENCL: 00

SUB CODE: 00

NO REF SOV: 000

OTHER: 000

Card 3/3

SHOSTAKOVSKIY, M.F.; VLASOV, V.M.; GREKOV, Y. P.I.

Polyfunctional acetals. Synthesis of acetylenic acetals based on primary and secondary acetylenic alcohols and vinyl alkyl ethers. Zhur. ob. khim. 34, no. 5:1403-1407 My '64. (MIRA 17:7)

1. Irkutskiy institut organicheskoy khimii Sibirskogo otdeleniya AN SSSR.

SHOSTAKOVSKIY, M.F.; VLASOV, V.M.; NIKIFOROV, A.A.

Interaction of cyclic acetals with thiophenol. Zhur.ob.  
khim. 34 no. 5:1686-1687 My '64. (MIRA 17:7)

1. Irkutskiy institut organicheskoy khimii Sibirskogo  
otdeleniya AN SSSR.

SHOSTAKOVSKIY, M.F.; VLASOV, V.M.; MIRSKOV, R.G.

Synthesis of organotin acetylenic acetals. Zhur.ob.khim. 33  
no.6:2076 Je '63. (MIRA 16:7)

1. Irkutskiy institut organicheskoy khimii Sibirskogo otdeleniya  
AN SSSR.  
(Tin organic compounds) (Acetal) (Acetylene compounds)

SHOSTAKOVSKIY, M.F.; VLASOV, V.M.; KUZNETSOVA, T.S.; GOLOVANOVA, N.I.

Synthesis of asymmetrical acetals of acetylenic glycols based  
on A.E. Favorskii's reaction. Zhur. ob. khim. 34 no.8:2804  
Ag '64. (MIRA 17:9)

F VLASOV, V.M.

4629. USE OF PU-26 TRACK SHIFTING MACHINE IN OPENCAST WORKING.  
Lapovenko, N.A. and Vlasov, V. M. (Ugol (Coal), Sept. 1951, 22, 23).  
The machine, for broad gauge tracks, is described and illustrated, and  
some performance figures are given. (L).



VLASOV, V.M.; ORLOV, Ye.I., redaktor; ALADOVA, Ye.I., tekhnicheskii redaktor

[Operator of a discontinuous track-shifting machine] Mashinist  
putepredvigatel'ia preryvnogo deistviia. Moskva, Ugletekhizdat,  
1954. 84 p. (MIRA 7:10)  
(Railroads--Track) (Mine railroads)

BUTYLOCHKIN, Mikhail Ivanovich; VLASOV, Viktor Mikhaylovich; SUBOGH, N.I.,  
red.; GORYUNOVA, L.K., red. izd-va; SHITS, V.P., tekhn. red.

[DM-54 diesel switcher for 750 mm gauge track] Dizel'nyi motovoz  
DM-54 kolei 750 mm. Moskva, Goslesbumizdat, 1958. 104 p.  
(Diesel locomotives) (MIRA 11:9)

SHOSTAKOVSKIY, M.F.; VLASOV, V.M.; KUZNETSOVA, T.S.

Disproportionation of acetals of acetylene glycols. Izv. AN  
SSSR. Ser. khim. no. 12: 2198-2199 '65.

(MIRA 18:12)

1. Irkutskiy institut organicheskoy khimii Sibirskogo otdeleniya  
AN SSSR. Submitted April 5, 1965.

VLASOV, V.M.; VASIL'YEVA, A.A.; TYUMENTSEVA, G.P.

Synthesis of acetals of acetylenic secondary-tertiary glycols  
based on Favorskii rearrangement. Izv. AN SSSR. Ser. khim.  
no. 12:2202-2204 '65. (MIRA 18:12)

1. Irkutskiy institut organicheskoy khimii Sibirskogo  
otdeleniya AN SSSR. Submitted April 6, 1965.

SHOSTAKOVSKIY, M.F.; VLASOV, V.M.; LOZHENITSYNA, A.S.; GAVRILOVSKAYA, A.A.

Synthesis of primary-tertiary acetylenic  $\delta$ -glycols. Izv. AN SSSR.  
Ser. khim. no.4:709-712 '65. (MIRA 18:5)

1. Irkutskiy institut organicheskoy khimii Sibirskogo otdeleniya  
AN SSSR.

L 2557-66 EWT(m)/EPF(c)/EWP(j) RM  
 ACCESSION NR: AP5024969  
 44,55 28 UR/0286/65/000/016/0033/0033  
 44,55 547.419,5.6.002.2  
 44,55  
 AUTHOR: Shostakovskiy, M. V.; Vlasov, V. M.; Mirskov, R. G.; Petrova, V. N.  
 TITLE: Preparation of tin-containing organosilicon acetylenic compounds, Class 12,  
 No. 173760  
 SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 16, 1965, 33  
 TOPIC TAGS: organosilicon compound, organotin compound, acetylene compound  
 ABSTRACT: An Author Certificate has been issued for a preparative method of tin-con-  
 taining organosilicon acetylenic compounds of the type,  $R'_3SiOR''C \equiv CSnR_3$ . The  
 method involves the reaction of  $R'_3SnOR''C \equiv CSnR_3$  [sic] with trialkylchlorosilanes  
 at low temperatures. R and R' stand for alkyl and R'' for  $-CH_2-$ ,  $-CH_2CH_2-$ ,  $-CH(CH_3)-$ ,  
 or  $-C(CH_3)_2$ . [BO]  
 ASSOCIATION: none  
 SUBMITTED: 30Jul64 ENCL: 00 SUB CODE: GC  
 NO REF SOV: 000 OTHER: 000 ATD PRESS: 4108  
 Card 1/1

SHOSTAKOVSKIY, Mikhail Fedorovich; VLASOV, Viktor Mikhaylovich;  
SHOSTAKOVSKIY, Zakhariy Fedorovich; TZEVSIIY, Konstantin  
Mikhaylovich; NIKOLAYEV, V.R., red.

[Curative polymers] TSelebnye polimery. Moskva, Izd-vo  
"Znanie," 1965. 43 p. (Novoe v zhizni, nauke, tekhnike.  
VIII Seriya: Biologiya i meditsina, no.6) (MIRA 18:5)

1. Chlen-korrespondent AN SSSR (for Shostakovskiy).

L 40701-65 EPP(c)/EWP(j)/EWT(m) P:-4/Pr-4 RM

ACCESSION NR: AP5010793

UP/0079/65/035/004/0750/0750

AUTHOR: Iskakov, V. I., et al.

TITLE: Synthesis of acetylenic organotin compounds B

SOURCE: Zhurnal obshchey khimii, v. 35, no. 4, 1965, 750

TOPIC TAGS: acetylenic organotin compounds

ABSTRACT: A new preparative method has been developed for the synthesis of acetylenic organotin compounds. The method involves the reaction of acetylene with organotin compounds in the presence of a catalyst. The reaction conditions are optimized to yield high yields of the desired products. The products are characterized by their physical and chemical properties.

ADD. INFO: No. Iskakov, V. I., et al. Zhurnal obshchey khimii, v. 35, no. 4, 1965, 750.

Card 1/2



L 40701-65

ACCESSION NR: AP5010743

SUBMITTED: 1 Nov 65

FN1

P 118 1000

N 111 1

11 11 11 11

Card 2/2 11/6

SHOSTAKOVSKIY, M.F.; VLASOV, V.M.; GRENOVSKIY, P.I.; BOLOGOVA, V.G.

Polyfunctional acetals. Part 2: Synthesis of new carbonyl-containing acetals. Zhur.ob.khim. 33 no.12:4021 D '63. (MIRA 17:3)

1. Irkutskiy institut organicheskoy khimii Sibirskogo otdeleniya AN SSSR.

SHOSTAKOVSKIY, M.F.; VLASOV, V.M.; GRENOVSKIY, P.I.; GOLOVANOV, N.I.

Polyfunctional vinyl ethers. Part 1: Vinyl alkynyl ethers. Zhur.  
ob.khim. 33 no.12:4020-4021 D '63. (MIRA 17:3)

1. Irkutskiy institut organicheskoy khimii Sibirskogo otdeleniya  
AN SSSR.

SHOSTAKOVSKIY, M. F.; VLASOV, V. M.; VASIL'YEVA, A. A.

Problem of the preparation of acetylenic  $\gamma$ -glycols and some of their transformations. Report No. 1: Synthesis of  $\gamma$ -glycols on the basis of 1-butyne-3-ol. Izv AN SSSR Ser Khim no. 4:696-698 Ap '64. (MIRA 17:5)

1. Irkutskiy institut organicheskoy khimii Sibirskogo otdeleniya AN SSSR.

V L A S O V  
ORLOV, V.P., kand.sel'skokhoz.nauk. Prinimali uchastiye: AVROV, N.N.;  
BASENKO, P.V.; VARLAMOV, D.A.; VASIL'YEV, I.I.; VLASOV, V.H.;  
VILEGZHANINA, V.A.; ZHIVET'YEV, V.G.; ZAVADSKIY, I.S.; ZALESSKIY,  
Ye.Ya.; ZAKORYUKIN, D.S.; ISHCHEENKO, I.N.; KACHIBAYA, I.D.; KISE-  
LEV, Ye.S.; KOZHEVNIKOV, I.Z.; LISITSYN, V.I.; MESHCHERYAKOV, V.F.;  
NYURIN-VERTSBERG, R.L.; PEREPELITSA, V.M.; RYABKOV, A.D.; SKURIKHIN,  
I.P.; SOLOV'YEV, N.A.; YAS'KO, N.G.. GREBTSOV, P.P., red.; ZUBRILINA,  
Z.P., tekhn.red.

[Our farms in 1965] Nashi khoziaistva v.1965 godu. Moskva, Gos.  
izd-vo sel'khoz.lit-ry, 1959. 230 p. (MIRA 13:2)  
(Agriculture)

VLASOV, V.N.; TROFIMOVICH, A.G.; GABITOV, R.Kh.

Ore drawing with vibration hauling and loading equipment. Gor.zhur.  
no.3:23-26 Mr '65. (MIRA 18:5)

1. Institut gornogo dela Sibirskogo otdeleniya AN SSSR (for Vlasov,  
Trofimovich). 2. Zlatoustovskoye rudoupravleniye (for Gabitov).

SHOSTAKOVSKIY, M.F.; VIASOV, V.N.

Synthesis of trialkylvinylloxysilanes based on acetylene and  
silanols. Zhur. ob. khim. 31 no.2:683 F. '61. (MIRA 14:2)

1. Institut organicheskoy khimii AN SSSR.  
(Silane) (Silanol) (Acetylene)

MIRONOV, A.N., ; VLASOV, V.M.

Some results of the work of the Stalin Mine for improvement of the technical and economic indices. Ugol' 36 no.6:13-14 Ja '61.  
(MIRA 14:7)

1. Nachal'nik shakhty im. Stalina kombinata Kizelugol' (for Mironov). 2. Glavnyy inzh. shakhty im. Stalina kombinata Kizelugol' (for Vlasov).

(Kisel Basin--Coal mines and mining)



VLASOV, V.N., prof.; MILOVIDOV, V.Ye., prof.

Treatment of ureterovaginal fistulas. Nauch.trudy Chetv.Mosk.  
gor.klin.bol'. no.1:302-306 '61. (MIRA 16:2)

1. Iz kafedry akusherstva i ginekologii 2-go Moskovskogo gosudarstvennogo meditsinskogo instituta imeni N.I. Pirogova (zav. kafedroy - professor A.A. Lebedev) i gienkologicheskogo otdeleniya Moskovskoy gorodskoy klinicheskoy bol'nitsy No.4 (nauchnyy rukovoditel' - prof. V.N. Vlasov, glavnyy vrach - G.F. Papko).  
(FISTULA, VESICO-VAGINAL)

VLASOV, V.N., prof.

Treatment of trichomonal diseases of the sexual organs of a woman  
by the "liutenurin" preparation. Nauch.trudy Chetv.Mosk.gor.klin.  
bol'. no.1:295-301 '61. (MIRA 16:2)

1. Kafedra akusherstva i ginekologii pediatricheskogo fakul'teta  
2-go Moskovskogo gosudarstvennogo meditsinskogo instituta imeni  
N.I. Pirogova (zav. kafedroy - A.A. Lebedev) i ginekologicheskaya  
klinika (zav. - prof. V.N. Vlasov), na baze Moskovskoy gorodskoy  
klinicheskoy bol'nitsy No.4 (glavnyy vrach G.F. Papko).  
(GENERATIVE ORGANS, FEMALE—DISEASES) (TRICHOMONIASIS)  
(PHARMACOLOGY)

VIASOV, A.S. (Novosibirsk); FADSEYEV, A.A. (Novosibirsk)

Automated processing and delivery of baggage. Zhest. kor. karte.  
10.8.77 24 16.65. (A/R 18.77)

1. Markhal'sk stantsii Novosibirsk-Glavny Zapadno-Sibirskoy  
dorogi (for Viasov). 2. Tarsungushchiy kommersheskiy operatsionnyy  
stantsii Novosibirsk-Glavny Zapadno-Sibirskoy dorogi (for Fadseyev).

VLASOV, V.N., gornyy inzh.; SHEVNIN, B.I., gornyy inzh.

Breaking ore in chambers by using boreholes drilled through  
the ore block. Gor. zhur. no.9:71-72 S '64. (MIRA 17:12)

1. Institut gornogo dela Sibirskogo otdeleniya AN SSSR,  
Novosibirsk.

BEKETOV, A.R.; VLASOV, V.G.

Thermal stability of polymorphic  $\text{CO}_2$ . Zhur.pril.Khim.  
36 no.9:2103-2105 S '65.

(MIRA 18:11)

VLASOV, V.P.; NIKITIN, V.P.; BEROVA, F.B.

Diagnostic value of the test for C-reactive protein. Sov. med. 24  
no.6:116-121 Je '60. (MIRA 13:9)

1. Iz kliniki obshchey terapii (nachal'nik - deystvitel'nyy chlen  
AMN SSSR prof. N.N. Savitskiy) Voenno-meditsinskoy ordena Lenina  
akademii imeni S.M. Kirova.  
(PROTEINS) (HEART--DISEASES)

VLASOV, V.P. (s. Semenov, Urenskiy rayon, Gor'kovskoy oblasti)

Attack of a brown bear. Priroda 44 no.9:119-120 S '55. (MIRA 8:11)  
(Bears)

VLASOV, V. P.

USSR/Miscellaneous - Industrial processes

Card 1/1 Pub. 103 - 11/22

Authors : Asnes, A. M.; Grebenchuk, B. I.; and Vlasov, V. P.

Title : Knurling instead of buffing of shaft necks

Periodical : Stan. i instr. 12, 26-27, Dec 1954

Abstract : The qualitative and economical advantages derived from knurling of shaft necks instead of buffing are listed. The construction of a knurling arrangement and its mode of operation are described. Table; drawing; illustration.

Institution : .....

Submitted : .....



84453

S/057/60/030/009/020/021  
B019/B054

26.2532

AUTHORS:

Vlasov, V. P. and Markin, S. A.

TITLE:

The Solution of the Unsteady Heat Conduction Problem for a Rod With Two Masses Attached to Its Ends. The Calculation of a Differential Thermobattery

PERIODICAL:

Zhurnal tekhnicheskoy fiziki, 1960, Vol. 30, No. 9,  
pp. 1128-1133

TEXT: The authors investigated the temperature distribution in a one-dimensional rod, to the ends of which masses are attached which are placed in media whose temperature changes linearly. The problem is formulated in the first part of the paper. The authors write down the linear heat conduction equation, and indicate the boundary conditions. The differential equation system set up here is solved with the aid of a contour integral by means of a meromorphic function which is found when solving the differential equation  $ay''(x) - by(x) - \lambda^2 y(x) = \varphi(x)$ . The solution obtained for the problem studied is used for the calculation of a Chromel-Copel differential battery. The construction of the latter is described with

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The Solution of the Unsteady Heat Conduction Problem for a Rod With Two Masses Attached to Its Ends. The Calculation of a Differential Thermobattery

84453  
S/057/60/030/009/020/021  
B019/B054

the aid of Fig. 1. Fig. 2 graphically shows the experimental values obtained for the time dependence of the thermoelectromotive force of a battery with 50 thermocouples at a temperature jump from 20° to 50° C. The theoretical curve calculated with the solution obtained here shows a good agreement. The authors thank Docent M. L. Rasulov for valuable remarks. There are 2 figures and 5 Soviet references.

SUBMITTED: April 8, 1959

Card 2/2

S/066/61/000/005/001/001  
D037/D113

AUTHOR: Vlasov, V.P., Engineer

TITLE: The pumping of liquid freon into cylinders

PERIODICAL: Kholodil'naya tekhnika, no. 5, 1961, 60-61

TEXT: With the aid of a diagram, the author suggests and describes a simple method of transferring freon into cylinders without using a pump. Prior to the transfer, the cylinder (2) into which freon is to be transferred must be cleaned, dried, and put under vacuum. An evaporator coil (11) made of copper tubes 12 x 1 mm in diameter is put on it and covered with a thermo-insulation (12). The evaporator's dimensions are: diameter - 220 mm, height - 1370 mm, coil pitch - 70 mm. The cylinder (2) thus prepared is placed on a decimal balance (13) together with an inclined support. The freon-delivery cylinder (1) is placed on a support with its valve downwards, 100 - 200 mm above the cylinder (2) and connected by a supply line (7). After the valves (3 and 9) have been opened and the nut (14) unscrewed, the line is blown through towards the cylinder (2). When freon splashes appear,

Card 1/3

The pumping of liquid freon ....

S/066/61/000/005/001/001  
D037/D113

the nut has to be tightly screwed. After the blowing through, the valve (9) has to be opened again. Passing through a nozzle (10) with an 1.5 mm aperture the liquid cooling medium is throttled and partially evaporated in the evaporator coil (11). As a result, the temperature and pressure in the cylinder (2) are reduced. Due to the difference in pressure, all the freon flows from cylinder (2) to cylinder (1) [Abstracter's note: Should this not read "from cylinder (1) to cylinder (2)"?]. At the beginning and end of the transfer, the temperatures in cylinder (1) are approximately 4°C and 2°C lower and the pressures 1 - 1.08 and 0.25-0.3 atmospheres lower than in cylinder (2). The pressure and temperature drop between the two cylinders (1 and 2) is maintained during the whole process. The transfer of 55 kg freon takes about 20 minutes. The process is controlled by a manometer (5), and a manovacuummeter (8), and through a small observation window (4). There is 1 figure. [Abstracter's note: Essentially complete translation].

Card 2/3

VLASOV, V.P.

An inadequate textbook ("Technical standardization in machine construction", T.V.Tolchenov. Reviewed by V.P.Vlassov).  
Vest.mash.34 no.12:99 D'54. (MLRA 8:2)

1. Nachal'nik issledovatel'skoy seksii tekhnicheskogo normirovaniya Zavoda ugol'nogo mashinostroyeniya imeni 15-letiya LKSMU.

(Machinery—Construction)

*VLASOV, V.P.*

USSR/ Engineering - Methods

Card 1/1 Pub. 128 - 10/23

Authors : Asnes, A. M.; Grebenchuk, B. I.; and Vlasov, V. P.

Title : The milling of shaft journals in place of polishing

Periodical : Vest. mash. 2, 48 - 50, Feb 1955

Abstract : A description is presented of a knurling roller made of ShKh-15 steel, hardened to 62 - 64 Rc., for milling shaft journals up to 8 and 9 degrees of surface smoothness. Table; drawings.

Institution: .....

Submitted: .....

S/122/60/000/009/007/015  
A161/A026

AUTHOR: Vlasov, V.P.

TITLE: Hydraulic Test Stand With Pressure Multiplier

PERIODICAL: Vestnik mashinostroyeniya, 1960, No. 9, pp. 45 - 46

TEXT: The article presents detailed information on design and operation of a new small test stand for testing hydraulic tightness and strength of equipment parts. It was designed by the author and F.Ye. Kotyshevskiy. The design principle is illustrated (Fig. 1). The stand is fitted with a pressure multiplier having a range of 0 - 1,300 kg/cm<sup>2</sup> (with permissible overload up to 1,500 kg/cm<sup>2</sup>); the input pressure of the multiplier varies from 0 to 165 kg/cm<sup>2</sup> (multiplication rate is 1 : 8); the work fluid is AMF-10 (AMG-10) according to GOST 6794-53 standard. (Tested parts are connected to the branch marked by arrow A in Fig. 1). The stand may be made universal and the filling and discharging of the multiplier in long dynamic tests may be automated by installing an electro-contact pressure gauge for 0 - 1,600 kg/cm<sup>2</sup> [an electric cock of H-5855-100 (N-5855-100) or H-5855-200 (N-5855-200), or GA-46 (GA-46) type and a relay unit.] For tests with short static load, a hand pump (Fig. 2) of HP-01 (NR-01) type is installed in the system behind the main pump. The stand system is simple in design.

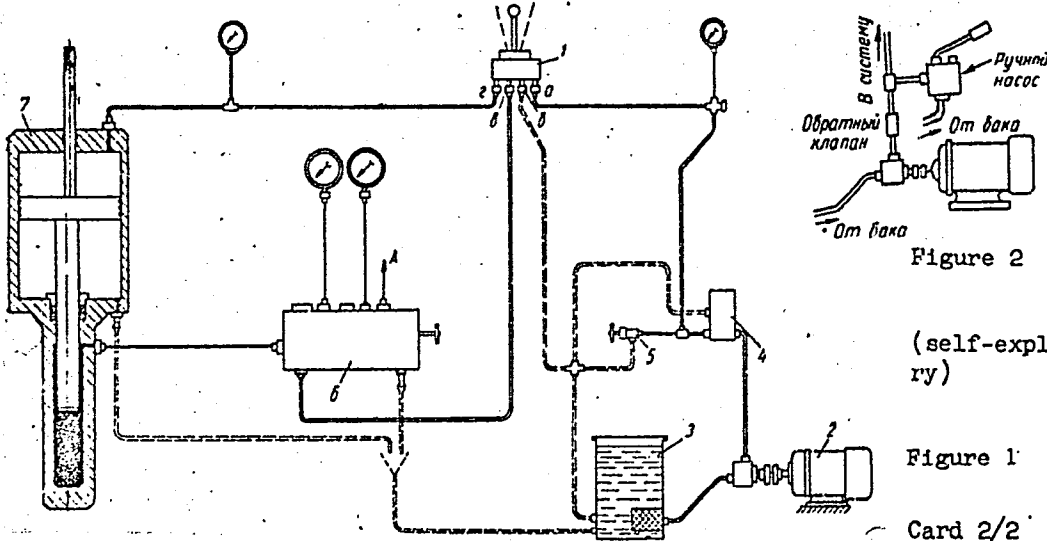
Card 1/2

# Hydraulic Test Stand With Pressure Multiplier

S/122/60/000/009/007/015  
A161/A026

sign and reliable in operation. It may replace slow and complex test stands used for the purpose. There are 2 figures.

Figures 1 and 2: Schematic diagram of hydraulic test stand with pressure multiplier.





VIASOV, V.P., nauchnyy sotrudnik

Soldering band saws for sawing logs. Trudy VSNIPILesdrev no.5:  
36-40 '62. (MIRA 16:5)  
(Band saws) (Solder and soldering)

POCHEKUTOV, Stepan Platonovich; VLASOV, Viktor Petrovich; OREL,  
Pavel Ignat'yevich; FONKIN, V.F., red.; YELCHINA, L.A.,  
red.izd-va; BACHURINA, A.M., tekhn. red.

[Preparation for the operation of wide band saws] Opyt pod-  
gotovki k rabote shirokikh lentochnykh pil. Moskva, Gosles-  
bumizdat, 1963. 53 p. (MIRA 17:1)

VLASOV, V. P.

Designing the bridge circuit of a ratio meter having both  
shelves connected with the measuring diagonal. Priborostroenie  
no.10:1-2 0 '62. (MIRA 15:10)

(Bridge circuits)

VLASOV, V. P.

"Investigation of the Process of Peat Pulp Concentration in Settling Ponds and a Study of the Properties of Sediment." Sub 26 Jun 51, Moscow Peat Inst

Dissertations presented for science and engineering degrees in Moscow during 1951.

SO: Sum. No. 480, 9 May 55

VLASOV, V.P., kandidat tekhnicheskikh nauk.

Average thickness of the hydraulic peat layer lost in a peat bog and the depth of lowering the peat pump. Torf.prom. 31 no.7: 22-24 '54. (MLRA 7:11)

1. Moskovskiy torfyanoy institut.  
(Peat industry)

VLASOV, V.P., kandidat tekhnicheskikh nauk.

~~Shrinkage of peat during drying.~~ Terf.prom. 32 no.8:13-15 '55.

1.Moskovskiy terfyaney institut.  
(Peat)

VELLER, M.A., professor; ABKHAZI, V.I., kandidat tekhnicheskikh nauk;  
ANTONOV, V.Ya., dotsent; VIASOV, V.P., kandidat tekhnicheskikh nauk;  
KIRYUDCHEV, A.M., kandidat tekhnicheskikh nauk; RAPIOVETS, I.L.,  
dotsent; SIPKIN, M.A., dotsent; YEFIMOV, P.N., redaktor; LARIONOV,  
G.Ye., tekhnicheskii redaktor

[Hydro peat technology] Tekhnologiya gidrotorfa. Izd. 2-oe, perer.  
Pod red. M.A.Vellera, Moskva, Gos.energ. izd-vo, 1956. 362 p.  
(Peat industry) (MLRA 9:11)

VLASOV, V.P., kand.tekhn.nauk

Shrinkage of peat in the process of its drying (concerning the  
article by P.G. Sal'kov). Torf. prom. 38 no.2:31-34 '61. (MIRA 14:3)

1. Kalininskiy torfyanoy institut.  
(Peat—Drying)



VERTINSKIY, K.I., prof.; ALIKAYEV, V.A., dotsent; PODKOPAYEV, V.M., dotsent; SHISHKOV, V.P., dotsent; ANDREYEV, I.A., veterin. vrach (Moskovskaya obl.); VLASOV, V.P., veterin. vrach (Moskovskaya obl.); MAMAYEV, A.P., veterin. vrach (Moskovskaya obl.); SHUL'GOVSKIY, I.P., veterin. vrach (Moskovskaya obl.)

Diagnosis, therapy, and prophylaxis of toxic dyspepsia in calves.  
Veterinariia 41 no.1:59-64 Ja '65. (MIRA 18:2)

1. Moskovskaya veterinarnaya akademiya (for Vertinskiy, Alikayev, Podkopayev, Shishkov).

VLASOV, V.P.

Investigation of a differential thermocouple cell. Izv. tekhn. no. 6:32  
Je '64. (MIRA 17:12)

SITENKO, V.M., prof.; VLASOV, V.S.

Evaluation of the lumbar ganglionectomy operation in endarteritis  
obliterans in the light of late results. Khirurgiia no.11:65-70  
'61. (MIRA 14:12)

1. Iz kafedry fakul'tetskoy khirurgii imeni S.P. Fedorova  
(nach. - prof. V.M. Sitenko) Voenno-meditsinskoy ordena Lenina  
akademii S.M. Kirova.

(ARTERIES—DISEASES)

(NERVOUS SYSTEM, SYMPATHETIC—SURGERY)

ACCESSION NR: AP4018374

S/0120/64/000/001/0100/0102

AUTHOR: Vlasov, V. S.; Yereimin, A. S.; Rozov, B. S.

TITLE: Precision pulse amplifier units

SOURCE: Pribery\* i tekhnika eksperimenta, no. 1, 1964, 100-102

TOPIC TAGS: amplifier, pulse amplifier, transistorized pulse amplifier, parallel feedback transistorized amplifier, precision transistorized amplifier

ABSTRACT: Transistorized amplifier units intended for experimental physics purposes are briefly described; their gain is from 1 to 20; leading-edge pulse time, 0.1 microsec or shorter; amplitude-characteristic nonlinearity, 0.2% or less. The effect of temperature on a P401 transistor gain is presented, simplified circuit diagrams of 3- and 4-transistor units are shown, and hints as to the most suitable application of current-feedback and voltage-feedback amplifiers are supplied. Orig. art. has: 4 figures and 2 formulas.

Card 1/2

ACCESSION NR: AP4018374

ASSOCIATION: Moskovskiy inzhenerno-fizicheskiy institut (Moscow Engineering and Physics Institute)

SUBMITTED: 01Feb63

DATE ACQ: 18Mar64

ENCL: 00

SUB CODE: GE

NO REF SOV: 000

OTHER: 001

Card 2/2

VLASOV, V.S.; YEREMIN, A.S.; ROZOV, B.S.

Units of exact pulse amplifiers. Prib. i tekhn. eksp. 9 no.1:  
100-102 Ja-F '64. (MIRA 17:4)

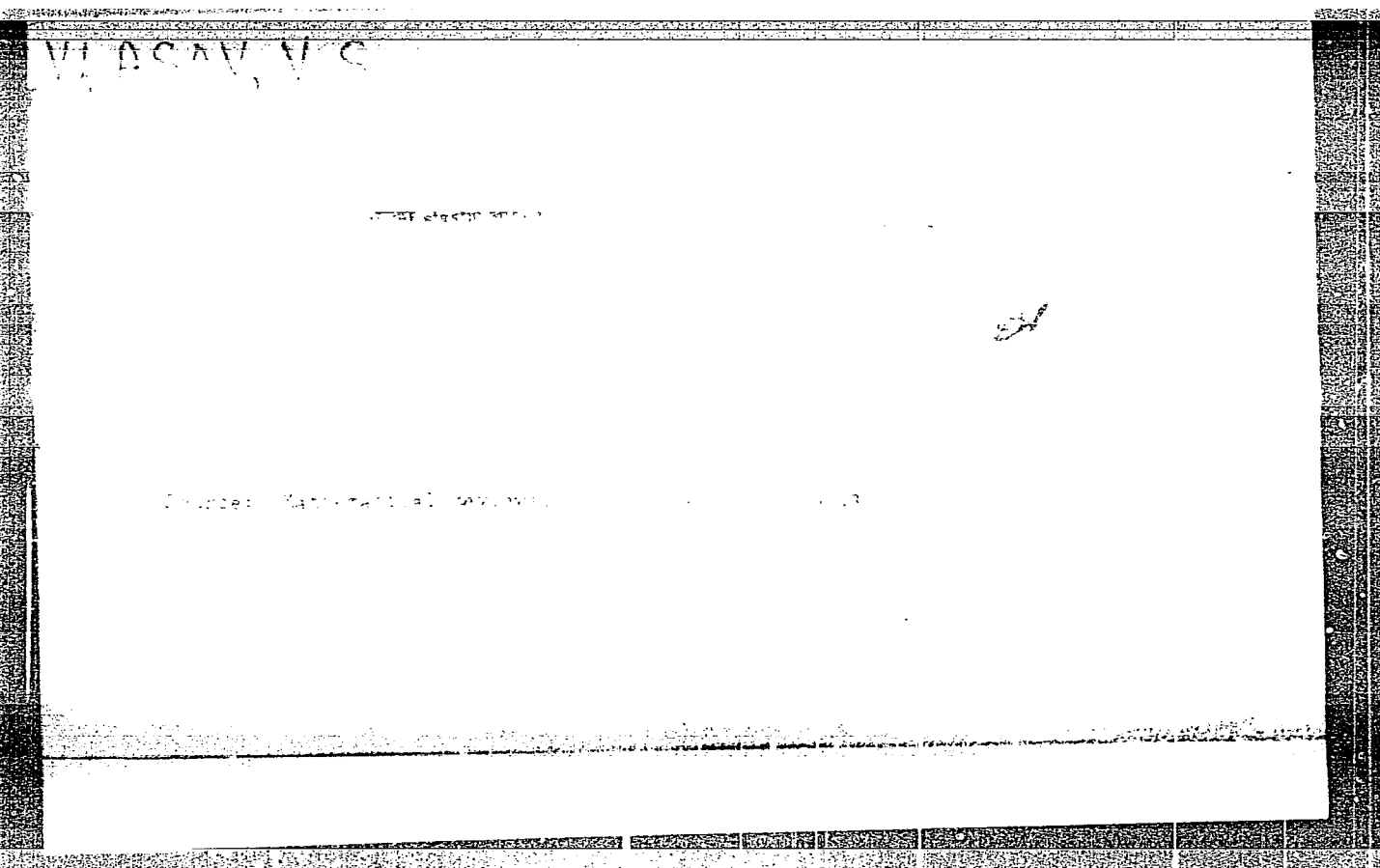
1. Moskovskiy inzhenerno-fizicheskiy institut.

VLASOV, V.S.; YEREMIN, A.S.; ROZOV, B.S.; SARAYEV, I.P.

Electron. tube-transistor amplifying sections with parellel  
feedback. Prib. i tekhn. eksp. 9 no.5:139-142 S-O '64.  
(MIRA 17:12)

1ST AND 2ND COLUMNS										3RD AND 4TH COLUMNS									
V.L.A.S.O.V. V.S.										PROCESSES AND PROPERTIES INDEX									
<div style="position: relative; height: 150px;"> <span style="position: absolute; top: 10px; left: 10px; font-size: 2em;">B</span> <span style="position: absolute; top: 10px; right: 10px; font-size: 2em;">24</span> </div>										<p><b>Some New Problems on Shells and Thin Structures.</b>  V. S. Vlasov, National Advisory Committee for Aeronautics, Technical Memorandum No. 1204, Mar. 1949, 46 pages. Translated from <i>Izvestiya Akademii Nauk SSSR</i> (Bulletin of the Academy of Sciences of the USSR), no. 1, 1947. (TL570 Un3tm.)</p> <p>A theory of cylindrical shells is developed. Only the membrane forces in the shell and the circumferential bending moment and its associated shear force are considered. The development is made with and without the geometrical restriction of zero shear and circumferential strain. Application to stress analysis, vibration analysis, and buckling analysis of shells is shown.</p>									
ASAC-SLA METALLURGICAL LITERATURE CLASSIFICATION										E2									
1ST COLUMN										2ND COLUMN									
3RD COLUMN										4TH COLUMN									





KORNILOV, I.I.; VLASOV, V.S.

Feasibility diagram of the system titanium --vanadium -- niobium.  
Zhur. neorg. khim. 2 no.12:2762-2765 D '57. (MIRA 11:2)  
(Titanium) (Vanadium) (Niobium)

VLASOV, V.S.; YEREMIN, A.S.; ROZOV, B.S.

Measurement of the current amplification factor of a transistor.  
Izm.tekh. no.3:46-47 Mr '63. (MIRA 16:4)  
(Transistors)

SOV/24-58-4-5/39

AUTHORS: Vlasov, V.S., Kornilov, I.I. (Moscow)

TITLE: The Composition-Heat Resistance Diagrams of the Binary Titanium-Vanadium and Titanium-Niobium Systems  
(Diagrammy sostav-zharoprochnost' dvoynykh sistem titan-vanadiy i titan-niobiy)

PERIODICAL: Izvestiya Akademii Nauk SSSR, Otdeleniye Tekhnicheskikh Nauk, 1958, Nr 4, pp 31 - 35 (USSR)

ABSTRACT: The binary systems were investigated up to 50 weight % of vanadium and niobium. The specimens were made by powder-metallurgical methods, pressing the powder into rectangular rods, heating in vacuo at 1 400 °C for 48 hours and finally turning them down into cylinders of 45 mm length and 4 mm diameter. Heat resistance was measured by a centrifugal method (Ref 4), consisting of determination of deflection  $\delta$  (in mm) produced by a bending stress  $\sigma$  (in kg/mm<sup>2</sup>). Heat resistance was expressed as the time required  $\tau$  (in hours) to produce a given deflection (5, 10 or 15 mm). The investigation was carried out in three successive stages (1) 100 hours at 500 °C with a

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SOV/24-58-4-5/39

The Composition-Heat Resistance Diagrams of the Binary Titanium-Vanadium and Titanium-Niobium Systems

bending stress of  $15 \text{ kg/mm}^2$ , (2) 100 hours at  $500^\circ\text{C}$  and  $20 \text{ kg/mm}^2$  and (3) 100 hours at  $600^\circ\text{C}$  and  $20 \text{ kg/mm}^2$ . The Ti-V alloys fractured in the first stage. Several Ti-Nb alloys endured a considerable time at  $500\text{--}600^\circ\text{C}$  and  $15\text{--}20 \text{ kg/mm}^2$ . The dependence of the deflection  $\delta$  on the V and Nb content is given in Figures 1 and 2. Hardness-composition curves (above) and heat resistance-composition curves (below) are shown in Figures 3 and 4. The dotted curve in Figure 4 shows hardness of Ti-Nb alloys before test. The continuous hardness curves are those taken after the test. In the  $\alpha$  region heat resistance increases with increase in Nb or V to a maximum at limiting solubility. In the  $\alpha + \beta$  region there is a heat resistance minimum. Hardness also increases in the  $\alpha$  region to a maximum. There is a continuous decrease in hardness in the  $\alpha + \beta$  region, except for the case where hardness was measured before the test. Figure 5 shows the microstructures before and after test. This shows the breaking up of the grains

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SOV/24-58-4-5/39

The Composition-Heat Resistance Diagrams of the Binary Titanium-Vanadium and Titanium-Niobium Systems

during test. The difference in the heat resistance and hardness curves in the  $\alpha + \beta$  region is due to the fact that hardness depends on the properties of the individual phases, whereas heat resistance depends on the interaction at the surface boundaries between the phases. This type of heat resistance-composition curve has also been observed in the Ti-Al, Ni-Al and Fe-Ni systems (Refs 6, 7 and 11) at medium temperatures and agrees with the theory formulated by Kornilov (Ref 5).

There are 5 figures and 12 references, 9 of which are Soviet and 3 English.

SUBMITTED: July 3, 1957

Card 3/3

SOV/24-58-7-28/36

AUTHORS: Vlasov, V.S. and Kornilov, I.I. (Moscow)

TITLE: Composition Versus Hot-strength Diagrams for Alloys of the Ternary System Titanium-vanadium-niobium (Diagrammy sostav-zharoprochnost' splavov troynoy sistemy titan-vanadiy-niobiy)

PERIODICAL: Izvestiya Akademii nauk SSSR, Otdeleniye tekhnicheskikh nauk, 1958, Nr 7, pp 136 - 139 (USSR)

ABSTRACT: The diagrams of the ternary system titanium-vanadium-niobium constructed by the authors (Ref 3) showed that all the alloys of the ternary system crystallise as continuous solid solutions. Specimens after hot-strength tests (200-250 hours at 500-600 °C) have either a single-phase  $\alpha$  and  $\beta$  or a two-phase  $\alpha + \beta$  structure (Figure 1). The boundaries of these regions with adjacent binary system diagrams and the titanium corner are shown in Figure 2. In the authors' experiments power-metallurgy methods were used to prepare 5 x 5 x 100 mm rectangular blanks from 99.5% pure Ti, 98.7% pure V and 98.7% pure Nb. After vacuum fusion cylindrical test pieces 45 mm long and 4 mm in diameter were machined. Three series of

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SOV/24-58-7-28/36

Composition Versus Hot-strength Diagrams for Alloys of the Ternary System Titanium-vanadium-niobium

compositions with V:Nb ratios of 3, 1 and 1/3 were used. The centrifugal test method (Ref 5 in Ref 1) was used. In the first stage of testing (100 hours) the temperature was 500 °C and the bending stress 15 kg/mm<sup>2</sup>; in the next 100 hours the stress was 20 kg/mm<sup>2</sup> at the same temperature; in the final 100 hours the temperature was 600 °C at the same stress. The measure of hot strength was the time taken to produce a deflection of 5, 10 or 15 mm. In Figure 3, these times are plotted against composition and compared with hardness vs composition curves before and after testing. Discussing their results in terms of phase changes the authors conclude that for the titanium corner of the ternary diagram the hot-strength maximum of the α-phase corresponds to its saturation limit; in the α + β two-phase region there is a minimum determined by the branches of the hot-strength curves descending from the boundaries of the two-phase with the one-phase region. The relations obtained are in agreement with theory (Ref 5 in Ref 1), with the authors' results for binary

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SOV/24-58-7-28/36

Composition Versus Hot-strength Diagrams for Alloys of the Ternary System Titanium-vanadium-niobium

Ti-V and Ti-Nb systems (Ref 1) and with other experimental results. In general, the authors conclude that for test temperatures such that hot strength depends mainly on a solution-precipitation mechanism of interaction at the phase boundaries the nature and number of the alloy components of a system influence the level of values in hot-strength vs composition diagrams, while the shape of the diagram is influenced by the phase composition and structure. There are 3 figures and 4 references, 3 of which are Soviet and 1 English.

SUBMITTED: August 9, 1957

Card 3/3

VILISOV, V.S., Cond <sup>at the</sup> "Sci--(also) "Study of the condition diagram  
of the triple titanium-vanadium-niobium system." Ann. [Publishing House  
of the Acad Sci USSR], 1952. 10 pp (Acad Sci USSR. Inst of Metallurg  
in A.A. Baykov), 165 copies (Kb, 45-58; 147

- 78 -

SOV/78-4-7-28/44

5(2), 18(7)  
AUTHORS:

Kornilov, I. I., Vlasov, V. S.

TITLE:

The Phase Diagram of the System Titanium - Vanadium - Niobium  
(Diagramma sostoyaniya sistemy titan - vanadiy - niobiy)

PERIODICAL:

Zhurnal neorganicheskoy khimii, 1959, Vol 4, Nr 7,  
pp 1630-1637 (USSR)

ABSTRACT:

In a previous paper (Ref 12) the authors stated that all alloys of the system mentioned in the title crystallize as continuous solid solutions on the basis of  $\beta$ -titanium. This is explained by the small differences in the atomic diameters (Table 1) of these elements and by the isomorphism of the lattices of V and Nb with that of  $\beta$ -titanium. The present paper reports about the experimental investigation of the phase diagram and the phase transformations in the ternary system mentioned by means of microstructural analysis, measurement of hardness, thermal expansion, and of the electric resistance. The composition of the alloys investigated is shown by table 2 and figure 1. Figure 2 shows pictures of some microstructures, figures 3-6 show the isothermal cross sections of the system at 1000°, 800°, 700° and 600°. Figure 7 is a spatial representation

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SOV/78-4-7-28/44

The Phase Diagram of the System Titanium - Vanadium - Niobium

of the phase diagram. The upper part has the continuous character of the solidus surface. At 885° a closely limited range of the solid  $\alpha$ -solution is formed in the titanium corner on the basis of the hexagonal  $\alpha$ -modification of titanium. Between this range and the  $\beta$ -solution there is a biphas  $\alpha+\beta$ -range. There are 7 figures, 2 tables, and 12 references, 9 of which are Soviet.

SUBMITTED: April 2, 1958

Card 2/2

83125

S/078/60/005/009/008/0:7  
B015/B064

18.1200

AUTHORS:

Kornilov, I. I., Vlasov, V. S.

TITLE:

Investigation of the Physicochemical Properties of the  
Alloys of the Ternary System Titanium - Vanadium - Niobium

PERIODICAL:

Zhurnal neorganicheskoy khimii, 1960, Vol. 5, No. 9,  
pp. 2017-2024

TEXT: The electrical resistivity, its thermal coefficient, thermal expansion, and the hardness of the systems Ti-Nb and Ti-V-Nb were investigated. The thermal preliminary treatment of the samples was done in two ways. The electrical resistivity was determined at 20° and 100°C with a ППТВ(PPTV) potentiometer. The hardness was investigated on samples that were subjected to microstructural analysis. The samples were annealed at different temperatures in accordance with the titanium content. On the basis of the phase diagrams obtained, a similar dependence of the electrical resistivity and temperature coefficient on the composition were found to exist in the titanium corner of the phase diagram of the three-component system, as well as the two-component system. The diagrams of

Card 1/2

83125

Investigation of the Physicochemical Properties S/078/60/005/009/008/017  
of the Alloys of the Ternary System Titanium - B015/B064  
Vanadium - Niobium

the thermal expansion of the ternary system in the range of a composition V : Nb = 1 : 1 showed that in the two-phase range there are sections of an irregular change of expansion, i.e., where the most intensive phase transformation takes place. The temperature of these sections decreases with the increase of the vanadium and niobium content, which corresponds to the phase diagram. Lines of the same hardness, i.e., isoscleris lines of the isothermal cross section for 600°C were drawn on the diagram of the system Ti-V-Nb according to the values of hardness measurement (Fig. 9). Change of hardness is also dependent on the phase structure. The optimum compositions of the alloys on the basis of  $\alpha$ - and  $\beta$ -phases with certain properties can be determined on the basis of the phase diagrams. There are 9 figures and 10 references: 7 Soviet and 2 US.

SUBMITTED: June 19, 1959

Card 2/2

35773  
S/180/62/000/001/009/014  
E111/E135

18.7500

AUTHOR:

Vlasov, V.S. (Moscow)

TITLE:

An investigation of phase transformations in steel on heating

PERIODICAL:

Akademiya nauk SSSR. Izvestiya. Otdeleniye tekhnicheskikh nauk. Metallurgiya i toplivo, no.1, 1962, 134-138 (+ 2 plates)

TEXT:

A qualitative and quantitative investigation was made of the mechanism and kinetics of the formation and growth of austenite grains in ferrite-cementite mixtures of a different degree of initial dispersion under conditions of isothermal annealing at 750 °C. Specimens of steel 45 (0.427% C; 0.22% Si; 0.61% Mn) in the form of discs 18 mm in diameter and 2 mm thick were used for the investigation. The heating and isothermal soaking was done in a lead bath. Four initial structures were tested. Structure I - medium plate pearlite and ferrite, mean distance between plates 0.14; heat treatment - heating to 830°, soaking for 30 minutes, cooling with the furnace at Card 1/4

An investigation of phase ...

S/i80/62/000/001/009/014  
E111/E135

200-250°/min. Structure II - martensite; heat treatment - heating to 830 °C, soaking for 30 minutes, cooling in water. Structure III - spheroidised structure I (with a non-uniform distribution of cementite grains); heat treatment - heating to 680 °C, soaking for 150 hours. Structure IV - spheroidised structure II (with a uniform distribution of cementite grains); heat treatment - heating to 680 °C, soaking for 150 hours. For the isothermal treatment specimens, in lots containing each type of structure, were immersed into the bath at 750 °C and, after an appropriate soaking time, quenched in water. The austenite formed during the treatment and fixed on quenching in the form of martensite was called conditionally "austenite". All quenched specimens were heated for one hour at 150 °C in order to obtain a clearer definition of this "austenite" under the microscope. The investigation was done by measuring Vickers hardness and qualitative and quantitative microstructural analyses. A study of the structures formed during isothermal transformation at 750 °C indicated that: 1) austenite grain growth takes place mainly in the direction of ferrite grains;

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An investigation of phase ...

S/180/62/000/001/009/014  
E111/E135

2) austenite grain growth results from the joining of neighbouring austenite grains and their coagulation; 3) overall increase in the amount of austenite takes place due to dissolution, from the surface, of cementite grains in contact with austenite and ferrite. Austenite grain growth, dissolution of cementite grains in contact with austenite and ferrite grains and coagulation of austenite grains take place simultaneously. The velocity of transformation of ferrite-cementite mixtures into austenite increases with increasing degree of dispersion of the initial cementite. The time of the beginning of the transformation (as detected by the metallographic analysis) for finely dispersed structures I and II was about 40-60 seconds, and for spheroidised III and IV structures, 120-300 seconds. On the basis of a comparison of the kinetic curves of isothermal transformation with kinetic curves of "dissolution" of cementite grains the following qualitative relationships were established. 1. The kinetics of an increase in the amount of austenite on heating are mainly determined by the kinetics of dissolution of cementite grains in contact with

Card 3/4

X

An investigation of phase ...

S/180/62/000/001/009/014  
E111/E135

ferrite. 2. Maxima of the velocities of austenite grain growth in structures III and IV coincide in time with the maxima of velocities of "dissolution" of cementite grains in contact with ferrite. 3. The size of the maximum of the velocity of austenite grain growth of structure III is 21 times higher and that of structure IV 15 times higher than the maximum of the velocities of "dissolution" of cementite grains in contact with ferrite. It is concluded that the method used permits qualitative evaluation of phase transformation processes on heating of sufficiently spheroidised initial structures. There are 4 figures.

SUBMITTED: September 2, 1961

Card 4/4

VLASOV, V.S.

Attachment for creep tests at very high temperatures. Zav.lab.  
28 no.7:868-871 '62 (MIRA 15:6)  
(Creep of metals)

FLEGONTOVA; AKATOV, S.; AKATOV, K.; ARUTYUNYAN; BAGDASAROV; PEREPELYUK;  
ORLIK; ROMENETS; IKHNO; VLASOV; TSIRKEL'; SYROYEZHKO.

Obligations in honor of the 22d Congress of the CPSU have been  
fulfilled. Masl.-zhir. prom. 27 no.11:1-3 N '61. (MIRA 15:1)

1. Zamestitel' nachal'nika ekonomicheskogo otdela Upravleniya  
meditsinskoy i parfyumernoy promyshlennosti Mosgorsovnarkhcz  
(for Flegontova). 2. Direktor Leningradskogo mylovarennogo zavoda  
imeni Karpova (for S.Akatov). 3. Direktor Nevskogo mylovarennogo  
zavoda (for K.Akatov). 4. Glavnyy inzh. Zaporozhskogo maslozhiro-  
vogo kombinata (for Arutyunyan). 5. Direktor Yerevanskogo mas-  
lozhirovogo kombinata (for Bagdasarov). 6. Direktor Ferganskogo  
maslozhirovogo kombinata (for Perepelyuk). 7. Glavnyy inzh.  
Chimkentskogo maslozhirovogo kombinata (for Orlik). 8. Direktor  
Kazanskogo zhirovogo kombinata (for Romenets). 9. Glavnyy inzh.  
Gomel'skogo zhirovogo kombinata (for Ikhno). 10. Direktor  
Novosibirskogo zhirovogo kombinata (for Vlasov). 11. Direktor  
Odesskogo masloekstraktsionnogo zavoda (for TSirkel'). 12.  
Direktor Vitebskogo masloekstraktsionnogo zavoda (for Syroyezhko).  
(Oil industries)

ORLOV, A.A., kand.fiz.-matemat.nauk, red.; SHPIL'RAYN, E.E., kand.tekhn.  
nauk, red.; VLASOV, V.T., red.; IOVLEVA, N.A., tekhn.red.

[Scientific problems connected with artificial satellites;  
collection of articles] Nauchnye problemy iskusstvennykh sput-  
nikov; sbornik statei. Moskva, Izd-vo inostr.lit-ry, 1959.  
528 p. (MIRA 12:12)

(Artificial satellites)

VLASOV, V. V.

VLASOV, V. V.: "Methods of multiple revelation of the contents of printed matter in a systematic catalogue." Moscow State Library Inst imeni V. M. Molotov. Moscow, 1956. (Dissertation for the Degree of Candidate in Pedagogical Science.)

Knizhnaya Letopis'  
No 32, 1956. Moscow.

YIASOV, Y.Y.

Blood-groups classification. Feldsher & akush. no.5:49-50 My '50.  
(CIML 19:2)

S/170/62/005/008/005/009  
B104/B102

AUTHOR: Vlasov, V. V.

TITLE: Automatic device for establishing quasistationary heat conditions

PERIODICAL: Inzhenerno-fizicheskiy zhurnal, v. 5, no. 8, 1962, 90-92

TEXT: A device providing continuously programmed control over quasistationary heat conditions has been developed as shown in Fig. 1, the program being controlled by the linear potentiometer (8) in which the slider is driven by a synchronous motor (14). In the measuring circuit the voltage (5) was adjusted linearly so as to compensate the thermo-emf of the thermocouple (4). An automatic electronic relay (15) served to control the power of the heater when, after it was switched on for the first time, the temperature rose too fast as compared with the programmed rate, owing to the heat capacity of the heater. The device secures a linear temperature rise over a wide range. There is 1 figure. ✓

ASSOCIATION: Institut khimicheskogo mashinostroyeniya, g. Moskva  
Card 1/3 (Institute of Chemical-Machine Building, Moscow)



S/170/62/005/009/006/010:  
B104/B102

AUTHOR: Vlasov, V. V.

TITLE: Automatic device for continuously determining the thermal diffusivity of solid materials under quasistationary thermal conditions

PERIODICAL: Inzhenerno-fizicheskiy zhurnal, v. 5, no. 9, 1962, 66 - 73

TEXT: A programmed automatic controller (Fig. 1) for establishing quasistationary thermal conditions in a calorimeter is described. The control program is set up by a linear potentiometer  $R_1$  the slider of which is connected with the shaft of a ПД-9 (PD-9) reversible motor. The thermo-emf is measured by a compensating measuring circuit ( $R_1, \dots, R_4$ ). The computer shown in Fig. 2 continuously computes the coefficient of thermal diffusivity  $a = kb/\Delta t$  of an unbounded plate, of thickness  $l$ , where  $k = l^2/2$  and  $b = dt(l, \tau)/d\tau$ , from the temperature differences  $\Delta t$ . A full account is given of this controller and computer. Practical studies have shown that errors may arise in  $a$  from the following factors: (1) non-

Card 1/2

Automatic device for continuously ...

S/170/62/005/009/006/G10  
B104/B102

linear heating; (2) non-uniform annealing temperatures at the lateral faces of the plate; (3) non-uniform temperature field in the contact surface between plate and heater; (4) nonlinearities in temperature recording; (5) inaccuracies in the equation for  $a$ ; (6) poor heat contact between plate and heater. Numerical results of  $a(t)$  are given for asbestos cement. There are 3 figures.

ASSOCIATION: Institut khimicheskogo mashinostroyeniya, g. Moskva  
(Institute of Chemical Machinery, Moscow)

SUBMITTED: January 30, 1962

Fig. 1. Automatic program controller. Legend: (1) reference input element; (2) magnetic amplifier; (3) phase-sensitive amplifier; (4)  $P\bar{U}$  -5 (RP-5) relay; (5) relay amplifier; (6) scheme for automatic and manual control; (7) CA-54 (SD-54) synchronous motor; (8) electronic time relay; (9) reversible motor; (10) circuit for automatic reversal; (11) voltmeter; (12) ammeter; (13) voltage controller; (14) calorimeter; (15) potentiometer.

Card 2/0 Z

137-58-6-11909

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 6, p 104 (USSR)

AUTHORS: Shvartsman, B.Kh., Vlasov, V.V.

TITLE: Relationship of the Temperature Limit of Sinter Formation to the Content of Iron Compounds in Tikhvin Bauxites (Zavisimost' temperaturnogo predela spekoobrazovaniya ot sodержaniya soyedineniy zheleza v boksitakh Tikhvinskogo mestorozhdeniya)

PERIODICAL: Tr. Vses. alyumin.-magn. in-ta, 1957, Nr 39, pp 129-132

ABSTRACT: An investigation is made of the effect of the Fe compounds in Tikhvin bauxites upon the sintering temperature limit. Mixes of bauxites having varying amounts of Fe were sintered with limestone and soda in the form of briquets at 1100°C to the temperature of onset of fusion. Sintering proper at the given temperature continued for 30 min. The sinter was then cooled and visually evaluated for physical condition, ground to -63 mesh, and leached with NaOH solution (25-26 g Na<sub>2</sub>O/liter) for 15 min, the liquid-to-solid ratio being 5 and the temperature 85°. It was found that the temperature limit of sinter formation fluctuates within the 1200-1325° range for bauxite having a weight ratio of Al<sub>2</sub>O<sub>3</sub>/Fe<sub>2</sub>O<sub>3</sub> = 2.5-3, and 1200-1275° for

Card 1/2

137-58-6-11909

Relationship of the Temperature (cont.)

bauxite with a weight ratio of  $\text{Al}_2\text{O}_3/\text{Fe}_2\text{O}_3 = 2$  regardless of the dosage of limestone in the charge and the amount of  $\text{SiO}_2$  in the bauxites (the  $\text{Al}_2\text{O}_3/\text{SiO}_2$  weight ratio was 2.59-3.86). The effect of increasing the Fe contents of the bauxites as the  $\text{Al}_2\text{O}_3/\text{Fe}_2\text{O}_3$  weight ratio changed from 3 to 2 consists of narrowing the temperature range of sintering, reducing the temperature of onset of sinter fusion by 25-50°, and reducing the extraction of alumina and caustic from the aluminum with standard leaching.

N.P.

1. Sintered aluminum ores--Temperature factors
2. Iron compounds--Thermal effects

Card 2/2

S/137/62/000/007/057/072  
A160/A101

AUTHORS: By ~~Yu. F.~~, Yu. F., Vlasov, V. V., Rozanov, A. N.

TITLE: Some properties of triple  $\beta$ -solid solutions of zirconium with niobium and molybdenum

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 7, 1962, 72, abstract 7I476:  
(In collection: "Metallurgiya i metalloved. chis. metallov". no. 3, Moscow, Gosatomizdat, 1961, 82 - 95)

TEXT: Smelted Zr-iodide-base cast alloys with 7.5 - 48% Nb, 0 - 10% Mo, 0 - 1.1% Ni, 0 - 0.5% Cu, 0 - 0.50% Ag and 0 - 3% Ti were tested as to their oxidizability in the open air at 600°C. The lowest oxidation rate proved to have the alloy with 15% Nb and 10% Mo, especially with small additions (0.1 - 0.5%) of Fe, Ni, Cu and Ag. The black film which developed on the alloy of this composition contained, together with ZrO<sub>2</sub>, small amounts of the Nb<sub>2</sub>O<sub>5</sub>·6ZrO<sub>2</sub> composition. The alloy with 12% Nb+7-10% Mo can be deformed by the cold method without the formation of cracks. The recrystallization point of this alloy is 720 - 750°C. When tempered for 230 hours, the segregation of the 2nd phase of the 15% Nb+10% Mo alloy becomes noticeable only at 500°C. The hardness of the alloy begins to

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Some properties of triple  $\beta$ -solid solutions of...

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quickly decrease at testing temperatures  $> 500^{\circ}\text{C}$ . Tests at  $550^{\circ}\text{C}$  and  $\sigma_9 - 10.5$  kg/mm<sup>2</sup> revealed that the creep rate does not exceed  $5 \cdot 10^{-5}$  hour<sup>-1</sup>. The smelting point of the 15% Nb+10% Mo alloy equals  $1640^{\circ}\text{C}$ , and it decreases to  $1525^{\circ}\text{C}$  when adding 0.5% Fe, Cu, Ni, Ag. The coefficient of the linear expansion in the temperature range of  $100 - 800^{\circ}\text{C}$  equals  $6.5 \cdot 10^{-6}$  degrees<sup>-1</sup>. At  $500^{\circ}\text{C}$ , the coefficient of the heat conductivity is estimated at 0.2 watt/ohm.degree (somewhat higher than for the non-alloyed Zr).

L. Gomozov

[Abstracter's note: Complete translation]

Card 2/2

VLASOV, V.V., kand.med.nauk; MATSUEV, I.M. (Novosibirsk)

Complications and the outcomes in the operation for cryptorchism.  
Urologia 27 no.4:28-31 J1-Ag '62. (MIRA 15:11.)  
(TESTICLE--SURGERY)

VLASOV, V.V.

Rare complication in the treatment of prostatitis. Urologiia  
no.5:62-63 '62. (MIRA 15:12)  
(PROSTATE GLAND—DISEASES)  
(PARAFFINS—THERAPEUTIC USE) (INTESTINES—OBSTRUCTIONS)



KHALILEYEV, P. A.; VIASOV, V. V.

Magnetic Control of Rotating Bodies

Zav. Labor. 11, 7, 1945

VLASOV, V. V.

Application of Pattern-Making to the Problem of Rail Defectoscopy.

Ural State University imeni Gorkiy, Sverdlovsk, 1947.

So: U-1837, 14 April 52.

KHALILEYEV, P. A., VLASOV, V. V.

Magnetic Testing

Methods of magnetic defectoscopy used during high speed motin. Trudy Inst. fiz. met.  
No. 7, 1948.

9. Monthly List of Russian Accessions, Library of Congress, \_\_\_\_\_ 1953. Unclassified.

USSR/Engineering - Instruments  
Electromagnetism  
1 Nov 49

"Application of Modeling (Dimensional Analysis) to the Unipolar-Induction Problem of the Electromagnetic Defectoscope," V. V. Vlasov, Inst of Phys of Metals, Ural Affiliate, Acad Sci USSR, 4 pp

"Dok Ak Nauk SSSR" Vol LXIX, No 1 p. 37-40

Shows density of unipolar induction current by simple reasoning to be expressible in the cgs system in the following dimensionless products:  $1 \cdot 10^{-1}$ ;  $1(H/\sigma v)^{-1}$ ;  $\mu\sigma vL$ . Hence, current density can be written in two externally different expressions:

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USSR/Engineering - Instruments (Contd) 1 Nov 49

$$1 = C_1 \cdot (H/L) F_1(\mu\sigma vL)$$

$$1 = C_2 \cdot \mu\sigma v H F_2(\mu\sigma vL)$$

where C's are constants and F's are certain functions. By assuming  $\mu\sigma vL = C_1$  Vlasov obtains  $1 = K_1/L$  and  $1 = K_2 \mu\sigma v$ . Thus, he obtains various similarity theorems for electromagnetic phenomena in ferromagnetic media, and overcomes the difficulty of nonlinear dependence of magnetic permeability, which characterizes the medium, upon the field.

VLASOV, V V

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VLASOV, V. V.

126-3-29/34

AUTHORS: Vlasov, V. V. and Stoinskaya, E. E.

TITLE: On the influence of the magnetic non-linearity of the material of components on the field of crack-type defects. (O vliyaniy magnitnoy nelineynosti materiala izdeliya na pole defektov tipa treshchin).

PERIODICAL: "Fizika Metallov i Metallovedeniye" (Physics of Metals and Metallurgy), 1957, Vol.4, No.3, pp. 552-554 (U.S.S.R.)

ABSTRACT: Yanus, R.I. (1) and Sapozhnikov, A.B. (2) arrived at the conclusion that magnetic non-linearity of the medium should improve the possibilities of detection of defects for fields exceeding the field which corresponds to maximum permeability. The authors considered it of interest to investigate the defect field for various depths from the surface to the defect, since it can be anticipated that there will be a considerable influence on the field of the defect in the part of the component which is located between the defect and the surface of observation. For the investigations a specimen was prepared, a sketch of which is shown in Fig.1 and which was provided with artificial defects. The specimen consisted of two continuous cylinders and six bushings; these Card 1/2 contained various artificially produced defects. The results obtained are in qualitative agreement with the

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On the influence of the magnetic non-linearity of the material of components on the field of crack-type defects.(Cont.)

Yanus-Sapozhnikov theory and can be considered in the first approximation as an experimental confirmation of this theory. It was also found that formation of the field of the defect is appreciably influenced by the material of the layer directly adjacent to the edges of the defect and that improved detection of the internal defects are observed within the limits of a certain height which increases with increasing magnitude of the external field. It is possible to increase the field of open defects by applying relatively thin ferromagnetic inserts between the defect and the detection instrument.

There are 3 figures and 2 Slavic references.

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SUBMITTED: November 30, 1956.

ASSOCIATION: Institute Metal Physics Ural Branch of the Ac.Sc. USSR.  
(Institut Fiziki Metallov Ural'skogo Filiala AN SSSR).

AVAILABLE: Library of Congress

V. V. V.  
AUTHORS: Vlasov, V. V., and Pyatigorskaya, L. Z. 126-2-30/35  
'TITLE: Investigation of the influence of the material of a component on the field of a defect. (Issledovaniye vliyaniya materiala izdeliya na pole defekta).  
PERIODICAL: Fizika Metallov i Metallovedeniye, 1957, Vol.5, No.2, pp. 376-377 (USSR)

ABSTRACT: It was found experimentally that internal transverse cracks in heads of light-weight rails can be detected by a magnetic defectoscope to a greater depth than for rails of the heavier type if an induction of a frequency of 4 to 5 kc/s is used. This was attributed to the fact that light-weight rails have been longer in service and, therefore, were work hardened to a greater degree than heavy weight rails. The authors investigated the effect of differing magnetic properties in a layer of the metal on the field of a defect which simulated artificially a transverse crack. For investigating the field of the defect a specimen was used which was of the same design as that designed in earlier work (Ref.2). The defect consisted of a strip of 0.02 mm thick paper placed between the faces of two cylindrical specimens made of Steel 40, each being 10 cm long and 8 mm in dia. These cylinders were fitted with alternately hollow cylinders made of

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Investigation of the influence of the material of a component on the field of a defect. 126-2-30/35

Steel 10, 40 and 65 with an internal diameter of 8 mm and a wall thickness of 1.5 mm. Their coercive force was respectively 1.9, 3.5 and 11.8 Oe. Thus, the depth of the defect was 1.5 mm and the material had in two cases magnetic properties differing from those of the basic material. The investigations consisted of determining the tangential component of the field of the defect on the surface of the specimen and for this purpose it was placed between the poles of an electromagnet. The field was measured with a small flat coil and was determined by changing over the polarity of the current in the electromagnet. The results are plotted in Fig.1. It was found that a hard layer on the top does indeed bring about an increase of the field of a defect and this elucidates qualitatively the difference in the possibility of detection of defects in rails with little and with considerable work hardening of the surface layer. There are 1 figure and 3 Slavic references.

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ASSOCIATION: Institute of Physics of Metals, Ural Branch of the Ac.Sc. USSR (Institut Fiziki Metallov Ural'skogo Filiala AN SSSR)

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V. V. V. V.  
AUTHORS: Vlasov, V. V., and Pyatigorskaya, L. Z. 126-2-31/35  
TITLE: Comparative investigation of the field of open and internal defects. (Sravnitel'noye issledovaniye polya otkrytogo i vnutrennego defektov).  
PERIODICAL: Fizika Metallov i Metallovedeniye, 1957, Vol.5, No.2, pp. 377-378 (USSR)  
ABSTRACT: According to the theory of R. I. Yanus (Ref.1) which was further developed by Sapozhnikov, A. B. (Ref.2), the magnetic non-linearity of the material of a component which contains cracks is of great importance from the point of view of formation of the field of defects. Under magnetostatic conditions the field of a defect is produced by surface magnetic charges located directly at the walls of the defect and by space charges which are due to magnetic non-linearity of the material of the component in the sections of the metal which are near to the defect. The field of these charges show differing dependence on the magnetizing field. According to this theory, space charges will intensify the field of the defect in the case of magnetizing fields (internal field in the component) exceeding the field strength which corresponds to the maximum magnetic permeability and will weaken that field if the field strength is lower. One

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126-2-31/35  
Comparative investigation of the field of open and internal defects.

of the authors of this paper and E. E. Stoinskaya (Ref.3) studied experimentally the influence of magnetic non-linearity of the material of a component on the field generated by the defect. However, they studied only the field of a defect in the range of comparatively strong magnetic fields. The authors of this paper considered it of interest to investigate the field of internal defects within a wider range of magnetizing fields and for this purpose they made a comparative study of the field of an open and a closed defect of equal size. The investigations were carried out using an artificial defect which simulated the transverse crack at the head of a rail. A specimen was used which in design and dimensions was equal to that described in earlier work (Ref.3). The defect was formed by an 0.02 mm strip of paper between the two end faces of continuous steel cylinders and this was considered as being an open defect. The same defect became an internal one after sliding on a hollow cylinder with an internal diameter equalling the external diameter of the solid cylinders above the defect. The wall thickness of the

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Comparative investigation of the field of open and internal defects.

hollow cylinder was 1.5 mm and represented in the given case the depth of location of the defect. The investigation consisted of determining the tangential component of the field of the defect at the surface of the specimen. Whether it is permissible to use in the given case a specimen of the here mentioned design has been dealt with in the earlier work mentioned above (Ref.3). The specimen was placed between the poles of an electromagnet. The field was measured by means of a small flat coil during switching the current of an electromagnet. The results of measurements of the tangential components  $H_a$  of the fields of an open and of a closed defect as a function of the induction  $B$  in the specimen are graphed in Fig.1. Curves 1 and 2 refer respectively to the open and the closed defects. It can be seen from the graph that at low inductions (up to 4 kGauss), i.e. in weak fields, the field of internal defects is considerably lower than the field of an open defect. However, for inductions exceeding 4 kGauss the field of an internal defect  $H_a$  is higher than that of an open defect and the difference will be the more pronounced the higher the induction in the specimen.

Card 3/4 This difference in the behaviour of the field of a

Comparative investigation of the field of open and internal defects. 126-2-31/35

defect in dependence of the external field is in good agreement with the theory of Yanus-Sapozhnikov and is obviously due to the magnetic non-linearity of the material of the component. In Fig.1 the relation between  $H_d$  in Oe. and  $B$  in kGauss is graphed for both types of defects. There are 1 figure and 3 references, all of which are Slavic.

(Note: This is a complete translation).

SUBMITTED: August 21, 1957.

ASSOCIATION: Institute of Physics of Metals, Ural Branch of the Ac. Sc. USSR (Institut Fiziki Metallov Ural'skogo Filiala AN SSSR).

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